# **ZR-SF** – RADIAL TELESCOPIC STACKER



The ZR-SF Radial Telescopic Stacker offers a unique material handling solution for the Quarrying, Mining, and Rail Transportation industries and can also be utilised in Ports & Inland Terminals for Ship/Barge Loading and Unloading. The radial, telescopic and luffing features allows the operator full control when stockpiling a range of materials whilst eliminating segregation, degradation, contamination and compaction of material. The innovative design allows for up to +28% larger stockpile capacity when compared to conventional fixed length conveyor systems.

#### Zoomry Stacker's Application fields

It is used for flexible mobile stacking in various occasions, the stacking height can reach upto 20 meters. Because the stacker has the characteristics of being movable, rotatable and retractable, the stacking capacity and efficiency are greatly increased.

#### Zoomry Stacker's Advantage

It has high stacking efficiency and can realize rotary telescopic stacking;

Compared with the conventional loader whose stacking height is only 5m-8m, and the mobile telescopic stacker stacking height can reach 20m, which greatly improves the utilization rate of the site.

It is easy to move, after completing the stacking at site, it can be moved to other sites to continue working;

Compared with conventional large stackers and reclaimers and spreaders, this equipment is cost-effective;

Basic model	Width/mm	Maximum Capacity m3/h	Speed m/s	Standard length/m	Maximum angle	Telescopic length/m
ZR80SF	800	500	2.50	30/40/50	20°	10-20
ZR100SF	1000	850	2.50	30/40/50	20°	10-20
ZR120SF	1200	1500	3.15	30/40/50	20°	10-20
ZR140SF	1400	2100	3.15	30/40/50	20°	10-20
ZR160SF	1600	3500	4.00	30/40/50	20°	10-20

# ZR-SF - TYPICAL APPLICATIONS

- Stockpiling (Automatically) from secondary crushers and screens.
- Stockpiling crushed stone, sand and gravel, mineral ores.
- Stockpiling construction and demolition waste, top soil, coal, grain etc.
- Receiving crushed material and stockpiling safely over a quarry face/bench.
- Working as part of a mobile system on short to medium term projects.
- Ship loading directly to vessels.
- Loading directly to trucks or rail wagons.

#### ZR-SF - KEY FEATURES

- Can be packed into 40ft containers, which ensures easy and cost effective transport around the globe. It takes about 2 weeks for site assembling.
- Reduction of segregation, degradation, contamination and compaction of material when stockpiling
- Conveying material reduces dust levels, noise levels and carbon footprint.
- Conveying material eliminates the high cost of dump truck or shovel haulage and is the most cost-efficient and environmentally sound method of material transfer.
- Increased production capacities
- Lower capital investment
- Flexible and reliable mobile material handling equipment
- Reduced labour and operator costs
- Minimal civils' and planning permission required as it is mobile equipment.

# <u> ZR-SF – Best performance conveyor Idlers</u>

- We have ZOOMRY as our own brand in high quality conveyor idlers, while we also provide RULMECA brand conveyor idlers as opinion for choice.
- Full-automatic producing line to guarantee high quality conveyor rollers and conveyor idlers, price competitive while quality pursuing.

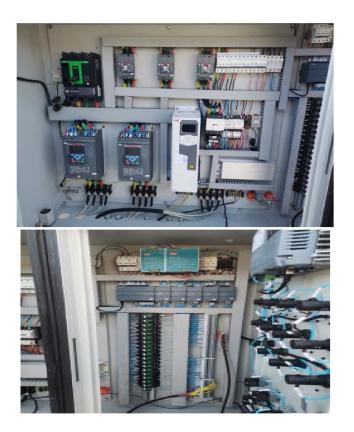


#### **ZOOMRY MOBILE STACKER DETAILS**

#### PLC Automatic Stockpiling System

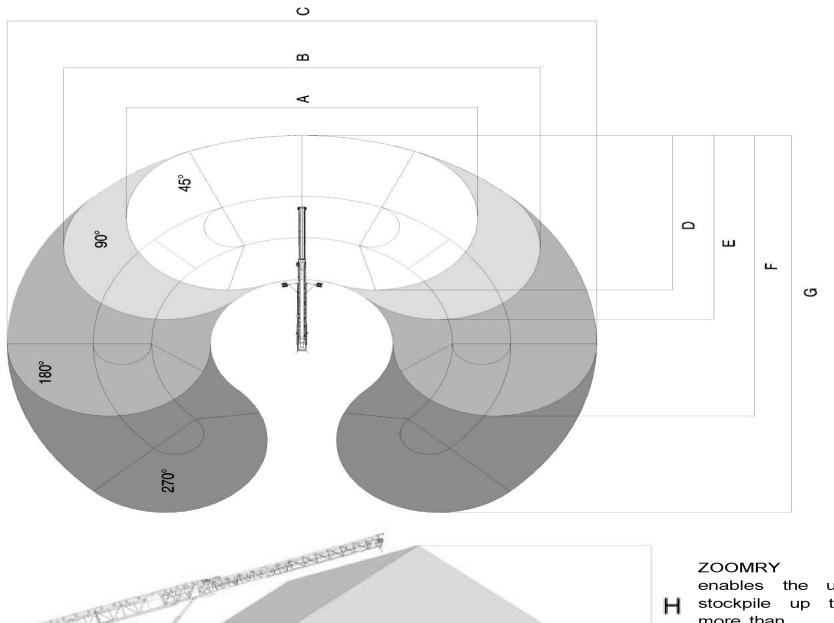
The radial, telescopic and luffing features of the ZOOMRY conveyor range allows the operator full control when stockpiling a range of materials whilst eliminating segregation, degradation, contamination and compaction of material.

- ZOOMRY fully automated stockpiling software,
  provides a high quality solution in the prevention of
  material segregation and degradation.
- The fully programmable PLC controller provides this clever solution with a versatile, ergonomic and reliable stockpiling system.
- Significantly reduces stockpile segregation, degradation and contamination with windrow stockpiling. Automates the entire stockpiling process which greatly reduces labour costs.
- 20m of cable with machine to allow for radial movement





# **ZR-SF CEMA 914mm-42m – STOCKPILING CAPABILITIES**



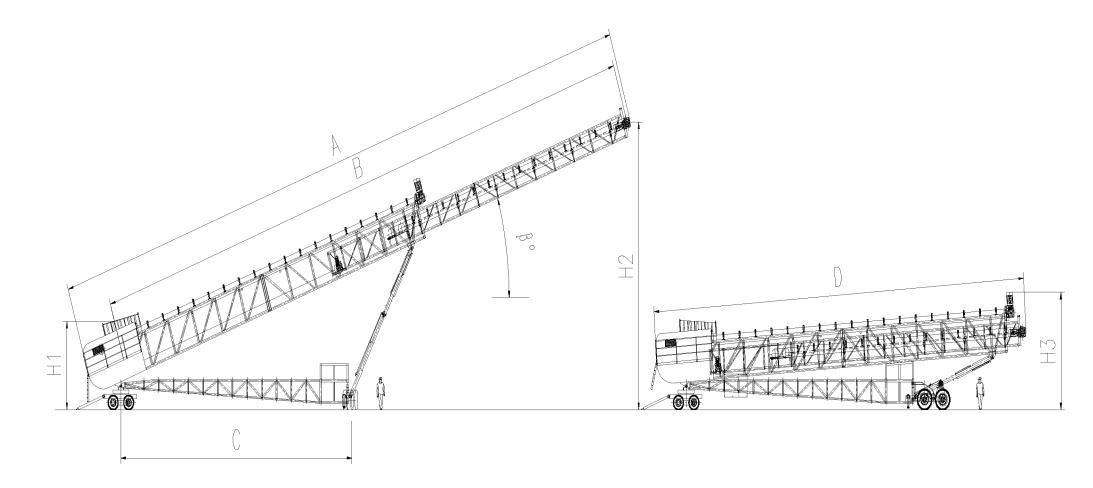
ZOOMRY feature enables the user to stockpile up to 28% more than conventional fixed boom radial stacking conveyors.

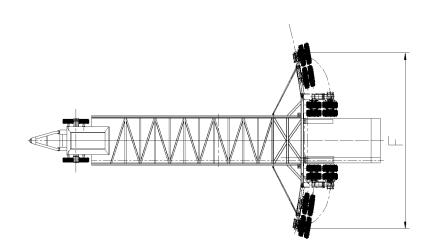
All stockpiling capacities are calculated based on material, with a bulk density of 1.6 tonnes per m3 (100 lb/ft3) Stockpile angle of repose 37°

	Stockpile Capacity(Volume)	Stockpile Capacity (Mass)	
	m3	Tonnes	
O°	4761	7618	
45°	13394	21430	
90°	22027	35243	
180°	39293	62869	
270°	56559	90494	

Sto	Stockpile Dimensions				
	Metric				
Α	71.82 m				
В	97.40 m				
С	120.48 m				
D	44.64 m				
E	53.18 m				
F	81.06 m				
G	108.94 m				
Н	13.04 m				

# **ZR-SF** – WORKING DIMENSIONS





	Metric
Overall Length (Conveyor)	43.58 m
Machine Working Length (18º)	42.12 m
Discharge Height (18⁰)	13.64 m
Feed in Height (Rear)	2.24 m
Operating Width	8.72 m

# **Feed Point**

- Tapered Dead box style feed boot for handling of material.
- Low tail style design for lower feed in heights
  Rubber skirting around bottom of feedboot to
  create a positive seal inside the feedboot.
- Safety guards at all pinch points are standard.
- Standard counterweight hooked profile which allows the machine to be lifted from below and moved around site.
- Enables support legs to deploy when there is no available external power source.

#### **Outer Conveyor**

- Proven Lattice frame structure gives the conveyor maximum strength whilst reducing overall weight.
- Open Lattice frame design allows for easy accessibility & maintenance, maximizing uptime/productivity when compared to enclosed structures
- Wing roller angle is adjustable.
- Primary scraper located at the head of the conveyor to remove any excess debris from the belt
- Scraper located at tail drum to remove debris from internal surface of the belt
- Emergency rope break system built into every conveyor as standard, which will activate in the unlikely event of a wire rope break







# **Inner Conveyor**

- Proven Lattice frame structure gives the conveyor maximum strength whilst reducing overall weight.
- Open Lattice frame design allows for easy accessibility & maintenance, maximizing uptime/productivity when compared to enclosed structures
- Wing roller angle is adjustable.
- Primary face scraper located at the head of the conveyor to remove any excess debris from the belt
- Scraper located at tail drum to remove debris from internal surface of the belt

#### **Telescopic Winch**

The telescopic conveyor is extended and retraced using a wire rope and winch system.

#### **Undercarriage**

- High class carbon steel is adopt for frame construction. This gives maximum strength at the critical load intersection point.
- Lattice frame undercarriage construction to give a maximum strength-to-weight ratio
- The undercarriage is hydraulically raised and lowered to transfer between radial and transport mode.

#### **Hydraulics**

- Electro-hydraulic power pack with 50-150 litre oil reservoirs
- This power pack operates all hydraulic functions – Raise/Lower conveyor and any other hydraulic functions









# **Radial Arms**

- Square Steel Radial arm frame construction. Lateral folding radial arms held in place by a tie bar.
- Internal hydraulic wheel or gear motor drive for increased torque over uneven or soft ground.
- 4 or 8 super single tyre.

#### **Assembly**

- Most sections are pre-assembled, just a few section need welding at site. There will detail instruction to supervision.
- And Zoomry engineer site supervision opinioned as well.
- All units are pre-wired with each unit using plug-&-socket technology for interlinking the sections
- And auxiliary equipment eliminating complex electrical work on site.
- The units include fully built and tested hydraulic systems, eliminating complex assembly on site







#### TRANSPORTATION & TESTING

#### Containerisation

- Zoomry units can be packed into 4x 40ft (12m) high cube containers for efficient and economic global travel
- The equipment is designed, manufactured, built and fully tested in the factory before dispatch.
- The client can inspect the completed unit during the testing procedure in the Zoomry for approval if required

#### 'Ro-Ro'

Units shipped fully assembled

#### **Testing & Training**

- All units are fully assembled, quality checked, tested and broken down before they left the factory significantly reduce commissioning time on site
- Zoomry can supply(If required and charge extra) an installation engineer to oversea the process, commission theunit and provide detailed training for the operators